

549, 929

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
7 October 2004 (07.10.2004)

PCT

(10) International Publication Number
WO 2004/085311 A1

(51) International Patent Classification⁷: **C01B 33/00**

(21) International Application Number:
PCT/EP2004/002664

(22) International Filing Date: 15 March 2004 (15.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
103 12 970.7 24 March 2003 (24.03.2003) DE

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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/085311 A1

(54) Title: PYROGENIC SILICON DIOXIDE POWDER AND DISPERSION THEREOF

(57) **Abstract:** Pyrogenically produced silicon dioxide powder with a specific surface area of between 5 and 600 m²/g and a carbon content of less than 500 ppm, which displays a specific dibutyl phthalate absorption of less than or equal to 1.2 g dibutyl phthalate/100 g SiO₂ per m² of specific surface area and a specific thickening action of less than 15 mPas/m² of specific surface area. It is produced by supplying vaporous tetramethoxysilane and/or tetraethoxysilane together with air and separately hydrogen to a burner, and allowing the mixture of gases to react in a flame in a reaction chamber connected in series to the burner, and separating the solid reaction product from the gas stream by known means, the lambda value in the burner being between 0.95 and 1.5 and sufficient secondary air also being supplied to the reaction chamber that the lambda value in the reaction chamber is between 0.8 and 1.6. The invention also provides a dispersion containing the silicon dioxide powder and the use of the powder and of the dispersion.